UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,131	09/13/2005	Caroline Rougaignon	GEI-103	2459

47888 7590 09/30/2008
HEDMAN & COSTIGAN P.C.
1185 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER	
JEAN-LOUIS, SAMIRA JM	
ART UNIT	PAPER NUMBER
1617	
MAIL DATE	DELIVERY MODE
09/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/524,131	ROUGAIGNON ET AL.	
	Examiner	Art Unit	
	SAMIRA JEAN-LOUIS	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-6 and 10-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-6 and 10-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The Examiner for this current application at the USPTO has been changed.

Examiner Jean-Louis can be reached at 571-270-3503.

Response to Amendment

This Office Action is in response to the amendment submitted on 06/20/08. Claims 1-2, 4-6, and 10-26 are currently pending in the application, with claims 3 and 7-9 having being cancelled. Accordingly, claims 1-2, 4-6 and 10-26 are being examined on the merits herein.

Receipt of the aforementioned amended claims and drawings is acknowledged and has been entered.

In view of applicant's amendment of claim 13 which now correctly depends from claim 12, the objection of claim 13 is hereby withdrawn. Similarly, given applicant's amendment of the trademark names the rejection of claim 13 under 35 U.S.C. § 112, second paragraph is withdrawn. However, given that claim 20 still remains unclear and given that the amendment of claim 20 did not render such claim definite, the rejection of claim 20 under 35 U.S.C. § 112, second paragraph remains proper.

Applicant's argument with respect to Guittard et al. who does not teach routes of administration that allow a steady release of the active ingredient over a long period of time has been fully considered but is not found persuasive. Examiner respectfully

points out that the claims are mainly directed to a composition. The use of the composition for treatment of urinary incontinence and for vaginal and rectal route is an intended use and as such is not afforded patentable weight in a composition claim. It is further noted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the limitation of the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. *See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963)*. Thus, the intended use of for the treatment of urinary incontinence and intended for vaginal or rectal administration is not afforded patentable weight in the aforementioned composition. Moreover, Guittard et al. particularly teach various dosages that allow a steady release over a prolonged time to provide control or sustained release (see col. 6, lines 25-30). Thus, Guittard et al. do indeed teach administration of drugs that allow steady state contrary to applicant's arguments.

Applicant's contention that Guittard et al. teach a ratio of desethyl metabolite to oxybutynin of 0.178 which would result in producing atropinic side effects has again been fully considered but is not found persuasive. Again, Examiner refers applicant to the aforementioned argument that the claims are directed to a composition and as such intended use in a composition is not afforded any patentable weight. Moreover, Guittard et al. clearly teach delivery means for administration of oxybutynin for lessening

the circulating levels of desoxy metabolites and reduce side effects associated therewith. Moreover, the claims as previously filed did not require a ratio limitation and therefore applicant's arguments are moot. Since Guittard et al. teach the exact same composition as applicant, Guittard et al. do indeed anticipate applicant's invention.

Applicant's argues that Guittard et al. teach dosage formulations containing osmotic agents such as sodium chloride or various dosages incompatible with vaginal or rectal delivery. Such arguments have been considered but are not found persuasive. Again, Examiner refers applicant to the aforementioned arguments which state that the claims are directed to a composition and intended use in a composition is not given any patentable weight. Moreover, Examiner points out that Guittard et al. teach various dosage forms including a hydrogel dosage form containing sodium chloride as the osmotic agent (see col. 7, lines 66-67). Gupta et al. teach that hydrogels are the new types of polymer-based controlled-released drug delivery systems currently use in biomedical and pharmaceutical applications (Gupta, DDT, Vol. 7, No. 10, May 2002, pg. 569, abstract and left col. paragraph 2). Importantly, Gupta et al. teach that hydrogels can be used for various routes including oral, rectal, and vaginal routes of administration (see pg. 569, right col., paragraph 1 and pg. 572, left col., paragraph 1). Consequently, in view of the state of the prior art taught by Gupta et al., hydrogels can necessarily be applied vaginally or rectally. However, applicant's arguments are again moot since the claims are directed to a composition and intended use in a composition is not afforded patentable weight. Thus, Guittard et al. do indeed anticipate applicant's invention.

For the foregoing reasons, the rejections of claim 20 under 35 U.S.C. § 112, second paragraph remains proper and is maintained. For applicant's convenience, the rejection of record for claim 20 is re-stated below. The rejections of claims 1-9, 14-15, and 19-22 under 35 U.S.C. § 102 (b) and claims 10-13 and 16-18 under 103 (a) also remain proper. However, in view of applicant's amendment, the following modified 103 (a) Final rejection are being made.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention (**see M.P.E.P 608.01 (k)**).

Claim 20 is drawn to a pharmaceutical composition, allowing T maxs of oxybutynin to be obtained between approximately two hours and approximately sixteen hours wherein the excipient or the vehicle is selected so that the speed of release is as long as possible. The claim terminology "speed of release is as long as possible" is indefinite, because it is unclear what is meant by the term "speed" and what property of drug release is to be affected.

However, for the sake of compact prosecution, the claim is being interpreted to mean that the Tmax ranges between 2h-16h.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

It is respectfully pointed out that the recitation "*for rectal or vaginal administration*" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robbie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claims 1-2, 4-6. and 10-26 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Guittard et al. (U.S. 6.262,115 B1, previously submitted) in view of Remington's (The Science and Practice of Pharmacy, Nineteenth Edition, Vol. I, 1985, pp. 957 and 960, previously submitted) in further view of Berko et al.

(European Journal of Pharmaceutics and Biopharmaceutics, 2002, Vol. 53, pgs. 311-315).

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Guittard et al. teach pharmaceutical compositions, dosage forms comprising oxybutynin alone or in combination with other drugs, as well as, a method for management of incontinence by administering oxybutynin alone or combined with other drugs (instant claims 1 and 22; see abstract; col. 1, lines 20-25; see Example 23, col. 19, lines 25-41). The pharmaceutical composition comprises oxybutynin (240 ng to 650 mg; instant claims 5-6 and 25; see col. 3, lines 11-13; as well as see Example 21 found in col. 18, lines 60-67) or a pharmaceutically acceptable salt (i.e., hydrochloride; instant claims 2 and 25; see col. 3, lines 14-21; and see col. 16-17, Examples 11, 13-15). Furthermore, oxybutynin may be used as its racemate, S- enantiomer or R-enantiomer (instant claim 2; col. 3, lines 21-22). In addition to oxybutynin, additional drugs such as steroids-progestin or estrogen may also be used alone or together (instant claims 1, 23,

and 26; col. 3, lines 32-co1.4 lines 1-23; and see col. 18-19, Examples 20-21). Many estrogen steroids which may be utilized include estriol, estradiol and esters, ethers and mixed ethers of estriol and estradiol (instant claims 1, 23, and 26; col. 3, lines 57-67 to co1.4 line 1; and see col. 19, Example 22) and the doses of the estrogens may range 10 ng to 600 mg (instant claim 26; col. 4, lines 2- 4; and see col. 19, Example 22). Administration of oxybutynin alone or combined with other therapies includes manufacture of a single drug which results in the dissolution or release of the drug over a 24 hour period of time (instant claims 19 and 21; col. 4, lines 41-44; and see Examples 16-19 spanning col. 17-18). The pharmaceutical composition taught may be manufactured as a hydrogel osmopolymer (col. 11, lines 27-32). One of the components of the hydrogel is hydroxypropylmethylcellulose (instant claims 14-15 and 24; see col. 16, Example 14). And finally, Guittard et al. disclose both an immediate release formulation which is administered every 8 hr as well as a controlled release formulation wherein it is administered once in 24 hr. Both the immediate release and the controlled release formulation and single versus multiple dosing regimens of the controlled release formulation resulted in similar plasma Auc values (see col. 20 lines 51-67 and col. 21, lines 1-10). Moreover, since the dosage amount affects the pharmacokinetic profiles including Tmax, the Tmax of Guittard et al. would necessarily be similar to applicant's Tmax as they both teach the same approximate dosage (instant claim 20).

Guittard et al. do not teach the inclusion of a Carbomer, or specific bioadhesive silicic acid derivatives or salts thereof as the gelling agent, the semisynthetic glycerides, WITEPSOL® or SUPPOCIRE®.

Remington's: The Science and Practice of Pharmacy, Nineteenth Edition, Vol I, 1985, pp. 957-960 teach that the inclusion of a bioadhesive (i.e. silicic acid derivatives; instant claims 10-11) permits close contact of agents to the mucous lining and further limits the transit so that a high concentration gradient across the membrane may be maintained for an extended period of time. Furthermore, polycarbophil (i.e. Carbomer; instant claims 16-19) and other polyacrylic acid-based polymers are known to chelate calcium ions in physiological buffers, which may be beneficial in increasing paracellular transport or serve to form matrices or improve the bioavailability of a drug (see p. 960). Furthermore it is well established that polycarbophil is especially useful for prolonging drug delivery for vaginal applications including vaginal gels (instant claim 4; see p. 957, Bioadhesive section).

Berko et al. teach formulations of suppositories using WITEPSOL® or SUPPOCIRE® bases and the differences in release of a drug over time (see p. 313, Figure 1), as well as the effect of different surfactant concentrations on drug release (see p. 314, Figure 3). Importantly, Berko et al. teach that Suppocire is the best suppository base along with Whitepsol in diffusing drugs (instant claims 12-13 and 19; see abstract).

Thus, at the time of Applicants' invention, it would have been obvious to one of ordinary skill in the art seeking to re-formulate the oxybutynin therapy taught by Guittard et al. for an extended release formulation and formulate it as a vaginal gel or a rectal suppository with polycarbophil added since Remington teach that addition of polycarbophil and bioadhesive suspension agents can increase drug diffusion and prolonging drug delivery. Because the prior art teaches that management of incontinence using localized drug delivery via vaginal or rectal suppositories, it would have been obvious to one of ordinary skill in the art to employ the polycarbophil as taught by Remington's: The Science and Practice of Pharmacy and re-formulate the oxybutynin as taught by Guittard et al. in order to extend the release of the oxybutynin and reduce the frequency of drug administration. Furthermore, because Remington's: he Science and Practice of Pharmacy teaches that carbophil chelates calcium ions, it would be obvious to one of

Similarly, at the time of Applicants' invention, one of ordinary skill in the art seeking to re- formulate the oxybutynin for a prolonged controlled release in the form of a suppository for rectal or vaginal use would have found it obvious to employ the bases taught by Berko et al, because these bases are art accepted and would merely require optimization of the oxybutynin bioavailability for the treatment of incontinence, which is well within the purview of a skilled artisan to optimize results.

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samira Jean-Louis whose telephone number is 571-270-3503. The examiner can normally be reached on 7:30-6 PM EST M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J. L. /

Examiner, Art Unit 1617

09/23/2008

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1617